

DEPARTMENT of ENVIRONMENTAL SERVICES
Water Division - Watershed Management Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: TRIO PONDS, ONE AND TWO	Lake Area (ha): 27.44
Town: ODELL	Maximum depth (m): 10.6
County: Coos	Mean depth (m): 3.7
River Basin: Connecticut	Volume (m ³): 1002500
Latitude: 44°42'38" N	Relative depth: 1.8
Longitude: 71°22'00" W	Shore configuration: 1.83
Elevation (ft): 2315	Areal water load (m/yr): 10.84
Shore length (m): 3400	Flushing rate (yr ⁻¹): 3.00
Watershed area (ha): 338.4	P retention coeff.: 0.54
% watershed ponded: 2.3	Lake type: natural w/dam

BIOLOGICAL:

		8 March 1999	3 August 1998
DOM. PHYTOPLANKTON (% TOTAL)	#1	NO WINTER PLANKTON	DINOBRYON 40%
	#2	ANALYZED	ASTERIONELLA 25%
	#3		MERISMOPEDIA 6%
PHYTOPLANKTON ABUNDANCE (units/mL)			
CHLOROPHYLL-A (µg/L)			2.37
DOM. ZOOPLANKTON (% TOTAL)	#1		ROTIFER SPP 41%
	#2		NAUPLIUS LARVA 12%
	#3		
ROTIFERS/LITER			36
MICROCRUSTACEA/LITER			27
ZOOPLANKTON ABUNDANCE (#/L)			73
VASCULAR PLANT ABUNDANCE			Scattered
SECCHI DISK TRANSPARENCY (m)			3.6
BOTTOM DISSOLVED OXYGEN (mg/L)		5.5	1.5
BACTERIA (E. coli, #/100 ml)	#1		
	#2		
	#3		

SUMMER THERMAL STRATIFICATION:

stratified

Depth of thermocline (m): 4.4
Hypolimnion volume (m³): 159500
Anoxic volume (m³): None

CHEMICAL:Lake: TRIO PONDS, ONE AND TWO
Town: ODELL

	8 March 1999		3 August 1998		
DEPTH (m)	2.5	5.0	1.5	4.0	7.5
pH (units)	5.5	5.4	6.1	5.0	5.2
A.N.C. (Alkalinity)	1.6	1.9	2.4	1.2	1.4
NITRATE NITROGEN	0.10	0.08	< 0.05	< 0.05	< 0.05
TOTAL KJELDAHL NITROGEN	0.10	0.20	0.30	0.30	0.20
TOTAL PHOSPHORUS	0.006	0.007	0.010	0.007	0.011
CONDUCTIVITY (μ mhos/cm)	20.1	20.5	15.1	15.0	17.1
APPARENT COLOR (cpu)	42	42	52	55	58
MAGNESIUM			0.21		
CALCIUM			1.2		
SODIUM			< 1.0		
POTASSIUM			0.26		
CHLORIDE	< 2	< 2	< 2	< 2	< 2
SULFATE	4	4	3	3	3
TN : TP	33	40	30	43	18
CALCITE SATURATION INDEX			4.7		

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1998

D.O. S.D. PLANT CHL TOTAL CLASS

2	2	1	0	5	Oligo.
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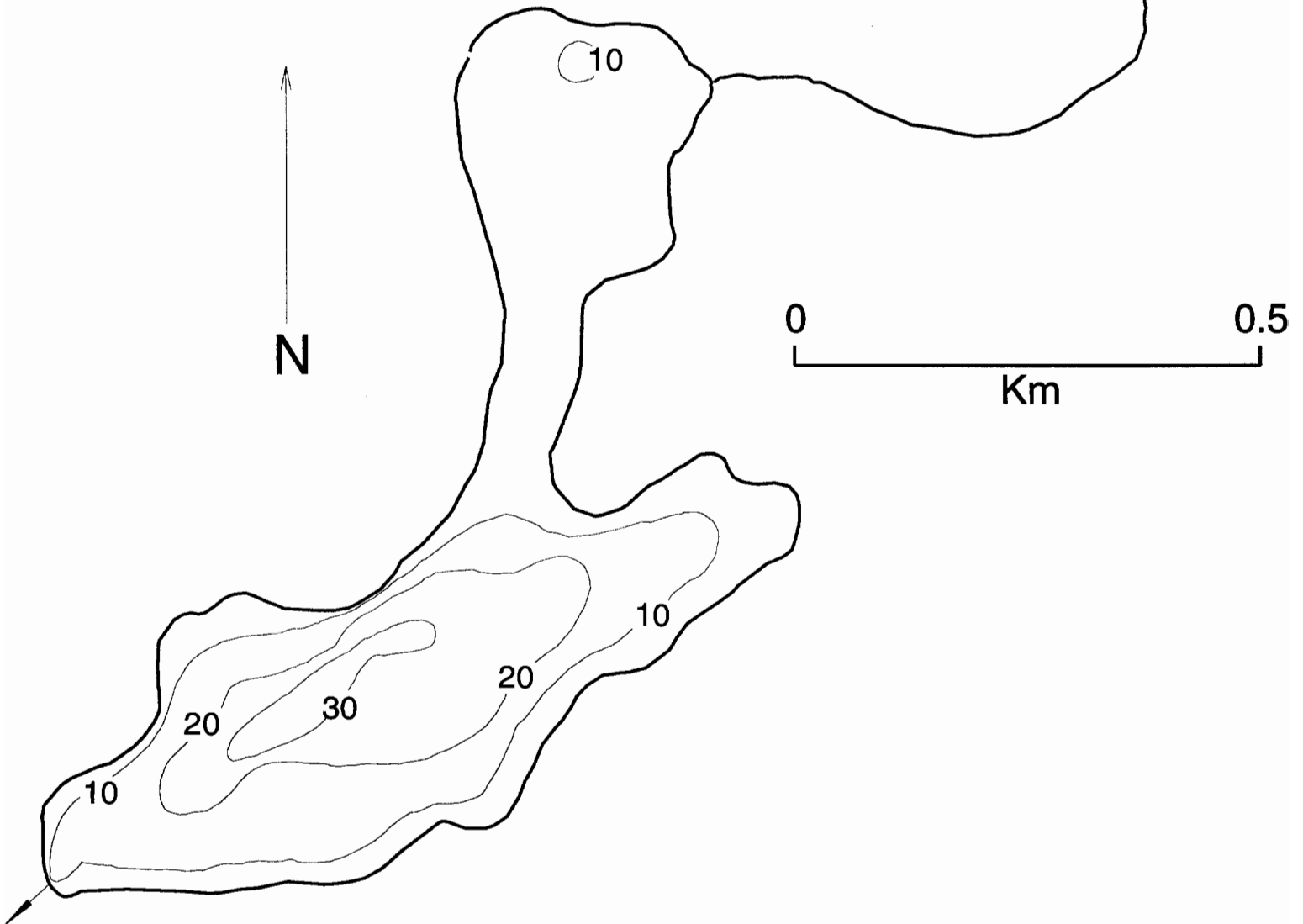
COMMENTS:

1. aka Lower Trio Pond or Big Trio Pond.
2. A chain of three partially manmade ponds were built by Groveton Paper Company in 1914 for log driving purposes, and were known as Trio Ponds #1, #2, and #3. The dam on pond #1 was later raised so that #1 and #2 ponds were joined into one pond (and often called Lower Trio Pond).
3. This is a tea-colored, acidic to moderately acidic, relatively unproductive remote pond accessible by 4-wheel drive only.
4. Approximately 10 camps were located along the southwestern end of the pond near the dam.

Trio Ponds

Odell

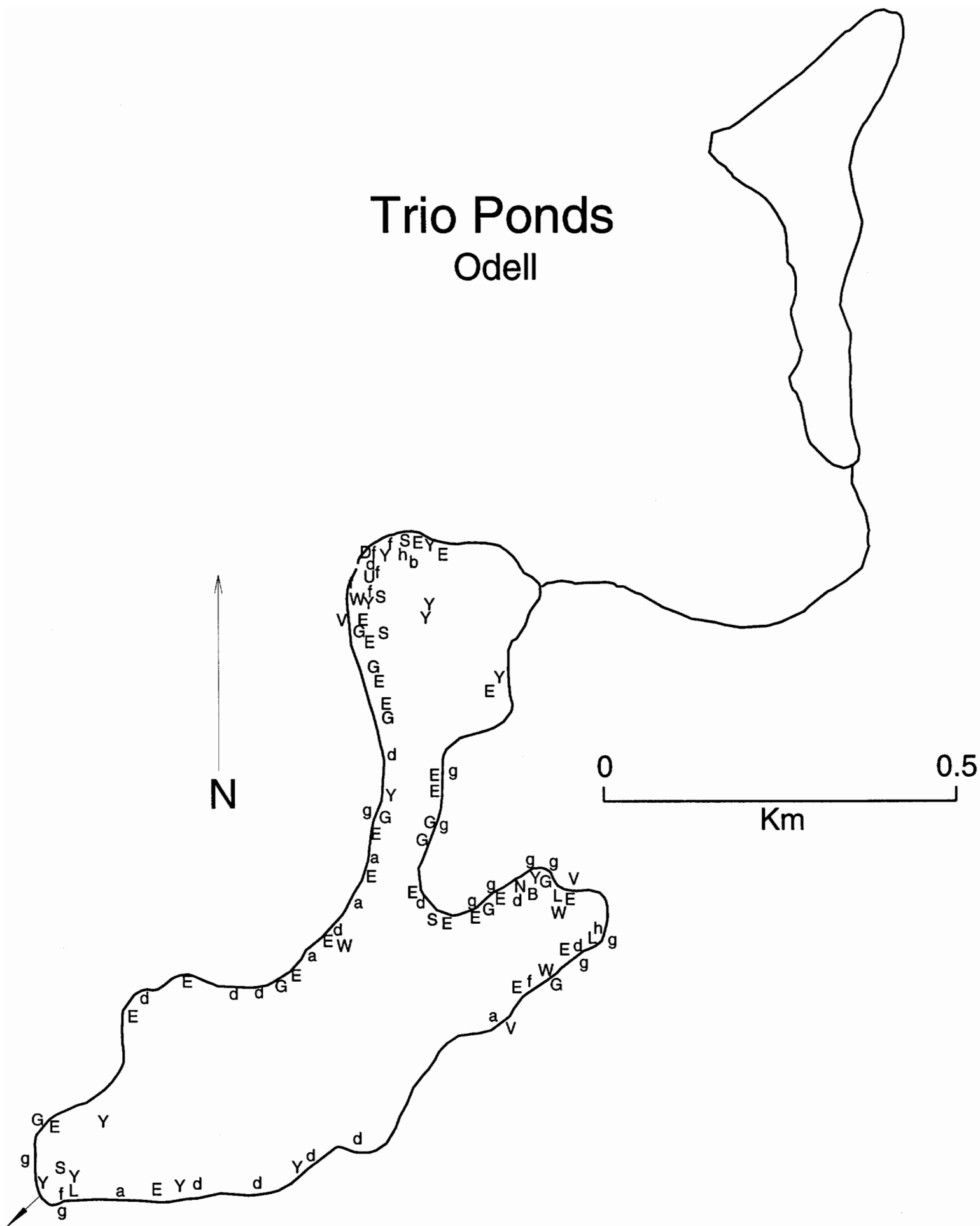
10 foot depth contours



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Trio Ponds

Odell



AQUATIC PLANT SURVEY

LAKE: TRIO PONDS, ONE AND TWO

TOWN: ODELL

DATE: 08/03/1998

Key	PLANT NAME		ABUNDANCE
	GENERIC	COMMON	
E	Eriocaulon septangulare	Pipewort	Scattered
L	Lobelia dortmanna	Water lobelia	Sparse
W	Potamogeton	Pondweed	Sparse
g	Myrica gale	Sweet gale	Scattered
f		Filamentous algae	Sparse
S	Sparganium	Bur reed	Sparse
G	Gramineae	Grass family	Sparse
h	Hypericum	St. John's-wort	Sparse
a	Spongilla	Freshwater sponge	Sparse
d	Dulichium arundinaceum	Three-way sedge	Sparse
Y	Nuphar	Yellow water lily	Sparse
B	Brasenia schreberi	Water shield	Sparse
V	Vaccinium corymbosum	High-bush blueberry	Scattered
N	Nymphaea	White water lily	Sparse
X		Sterile thread-like leaf	Sparse
b	Scirpus	Bulrush	Sparse
U	Utricularia	Bladderwort	Sparse
D	Drosera	Sundew	Sparse
I	Iris	Iris	Sparse

OVERALL ABUNDANCE: Scattered

GENERAL OBSERVATIONS:

1. A family of three loons and a hawk were observed.